

CLAIMS: *Please amend the claims according to the status designations in the following list, which contains all claims that were ever in the application, with the text of all active claims.*

CLAIMS: ~~We claim:~~ What is claimed is:

1. (CURRENTLY AMENDED) A method for face modeling, comprising the steps of:

(a) capturing a plurality of images for ~~an individual~~ a person with a single or a plurality of image capturing systems,

(b) processing said plurality of images to obtain demographic recognition of the person in ~~said~~ the captured images, ~~and~~

(c) choosing a face model specific to the demographic recognition of the person as an approximate face model, and

(d) (e) combining said demographic recognition with affine coordinate based mesh adjustment technique for said face modeling,

wherein said demographic recognition comprises gender and ethnicity recognition.

2. (CANCELED)

3. (CURRENTLY AMENDED) The method according to claim 1, wherein the method further comprises ~~a step for~~ a step of displaying visual feedback about said face modeling.

4 - 5. (CANCELED)

6. (CURRENTLY AMENDED) The method according to claim 1, wherein the method further comprises ~~a step for~~ a step of using affine lines and their slope adjustment, which is proportional to depth of the point, for model estimation.

7. (CURRENTLY AMENDED) The method according to claim 1, wherein said face modeling further comprises ~~a step for~~ a step of using said affine line properties without the need for calibrating the image capturing systems,
whereby the image capturing systems include cameras.

8. (CANCELED)

9. (CURRENTLY AMENDED) The method according to claim 1, wherein the method further comprises ~~a step for~~ a step of using ~~said~~ the affine line properties for re-projecting a matched pair in two images to a third image, once four facial landmarks are located in all of the three images.

10. (CURRENTLY AMENDED) The method according to claim 1, wherein the method further comprises ~~a step for~~ a step of using a single view to crudely model the face based on gender and ethnicity and then use anthropometric measures for identification.

11. (CURRENTLY AMENDED) The method according to claim 1, wherein the method further comprises ~~a step for~~ a step of using multiple views to model ~~said~~ the face in the image based on

the combination of the demographics and ~~said~~ the affine line properties and then use ~~said~~ the anthropometric measures for identification purposes.

12. (CURRENTLY AMENDED) The method according to claim 1, wherein the method further comprises ~~a step for a step of~~ using ~~said~~ the combination of ~~said~~ the demographics and ~~said~~ the affine line properties for face modeling, followed by novel view generation of the face using rendering tools.

13 - 15. (CANCELED)

16. (CURRENTLY AMENDED) An apparatus for face modeling, comprising:

(a) a single or a plurality of image capturing means directed at ~~said individual~~ a person,

(b) a processing means for recognizing ~~said~~ demographics from ~~said plurality of images~~ at least an image, and

(c) a selection means that chooses a face model specific to the demographic recognition of the person as an approximate face model, and

(d) (e) a processing means for combining ~~said~~ the demographics recognition with ~~said~~ affine coordinate based mesh adjustment technique for said face modeling,

wherein the demographics recognition comprises gender and ethnicity recognition.

17. (CURRENTLY AMENDED) The apparatus of claim 16, wherein said processing means further comprises a hardware system consisting of disparate cameras at disparate locations, images from which are used for said face modeling,
whereby usages of the disparate cameras comprise multiple processing of the face modeling for multiple users.

18. (CANCELED)

19. (CURRENTLY AMENDED) The apparatus of claim 16, wherein the apparatus further comprises a means for displaying visual feedback about said face modeling.

20. (CURRENTLY AMENDED) The apparatus of claim 16, wherein the apparatus further comprises a means for using said affine lines and their slope adjustment, which is proportional to depth of the point, for said model estimation.

21. (CURRENTLY AMENDED) The apparatus of claim 16, wherein the apparatus further comprises a means for using said affine line properties without the need for calibrating the image capturing systems,
whereby the image capturing systems include cameras.

22. (CANCELED)

23. (CURRENTLY AMENDED) The apparatus of claim 16, wherein the apparatus further comprises a means for using ~~said~~ the affine line properties for re-projecting a matched pair in two images to a third image, once ~~said~~ four facial landmarks are located in all of the three images.

24. (CURRENTLY AMENDED) The apparatus of claim 16, wherein the apparatus further comprises a means for using a single view to crudely model ~~said~~ the face in the image based on the gender and ethnicity and then use ~~said~~ anthropometric measures for identification.

25. (CURRENTLY AMENDED) The apparatus of claim 16, wherein the apparatus further comprises a means for using multiple views to model ~~said~~ the face in the image based on the combination of ~~said~~ the demographics and ~~said~~ the affine line properties and then use ~~said~~ the anthropometric measures for identification purposes.

26. (CURRENTLY AMENDED) The apparatus of claim 16, wherein the apparatus further comprises a means for using ~~said~~ the combination of ~~said~~ the demographics and ~~said~~ the affine line properties for ~~said~~ face modeling, followed by novel view generation of the face ~~undergoing rigid transformation~~ using ~~standard~~ rendering tools.

27 - 31. (CANCELED)